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ETHNOBOTANICAL STUDIES FROM AHMEDNAGAR DISTRICT, MAHARASHTRA

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The word 'Ethnobotany' is derived from two Greek words *ethnikos/ethnos* i. e. nation and botanikos / botane i. e. plant. Thus the etymological meaning of the word ethnobotany is the study of plants related to nation(s). The term 'Ethnobotany' was first coined by Harshberger (1896) for the study of plants used by primitive and aboriginal people. Simply ethnobotany is the scientific study of the relationship that exist people and plants.

Study area: The Ahmednagar district is largest district of Maharashtra occupying more or less the central position in the state and with an area of 17,413 sq.km. It is located between 18°02' and 19°09' north latitude and 73°09' and 75°05' east longitude. The district is bounded on the north by Nasik district, on the north-east by Aurangabad district, on the east by Beed and Osmanabad districts, on the south by Solapur district and on the west by Pune district, on the north-west it is surrounded by Thane district.

The district is divided into 14 revenue Taluka's. Major rivers such as Godhavari, Bhima, Mula and Pravara with 2 dams, viz Mula and Bhandardara are large enough to meet the water requirement of the district. Agriculture is the back bone of district economy. The major crops grown are sugar cane, ground nut, jawar, bajra, wheat, sunflower and grapes.

Forests: The total forest area in district is 1,432.64 sq km. It is 8.41% of the total geographical area of the district. The vegetation in general is mixed deciduous. It mainly consist Dry-tropical forest, Moist- tropical forest and Western-subtropical hill forest. The mountainous regions of Akola taluka are rich in medicinal plant resources. Pradhan and Singh (1999) reported 1044 total species in Ahmednagar district.

People: In Ahmednagar district total 12 tribes are reported. Out of this Bhil, Mahadeo koli, Pardhi, Thakar are the major tribal groups in the area. Besides these tribal groups, several other communities are staying as forest dwellers. As per 2001 census the total population of the district is 40,88,000. The tribal population is 3,03,000 (07%).

Methodology: The present included ethnobotanical survey and documentation of information, collection of plants which are utilized by localities for different purposes. The methodology used for procuring information through interviews of people with knowledge of plants for various purposes. The data presented here is based on extensive collections made in the different parts of Ahmednagar district and nearby areas during 2009-2014. During the fieldwork 2-3 voucher specimens of each plant were collected and numbered. The voucher specimens were made mostly at flowering or fruiting stage and poisoned before preparing herbarium by following standard methods (Jain and Rao, 1977). Plants characters were noted in the field. Collected plant specimens were identified with the help of keys to the families, genera and species provided in reputed floras like Cooke (1958), Singh et al (2000), Pradhan and Singh (1999), etc.

Results: Altogether 406 traditional plants have been enumerated and it includes botanical name, available synonyms, family, local name, phenological data, locality of the plant, which is followed by the notes. Finally available uses of the traditional plants have been furnished which are based on the Jain, 1991, Chopra et al 1956 & 1969, Ambasta, (1992) and Kapoor, (2001) etc.

For reference work libraries of National Botanical Research Institute, Lucknow, Botanical Survey of India, Pune, ARI, Pune, Library, BAMU, Aurangabad and Botany Department, Deogiri College were consulted.

Outcome of the research…….

- The present ethno-botanical explorations conducted in forest areas Ahmednagar District resulted in the traditional plant uses of 406 plants belonging to 98 families. The given data includes botanical name of species, vernacular name, family, plant part used, mode of applications.
- Also collected information about 372 medicinal plants belonging to 94 families & their method of preparation of medicine, mode of administration and details about its application.
- Ethno veterinary uses of 48 plants belonging to 35 families have been recorded.
- Total 101 edible plants from 43 families are recorded.

- Major diseases for which maximum number of plants used are Gastro-intestinal-disorders (47), Skin diseases (32), Wounds (31), Fever (30) & Cold/Cough (26).
- Total 765 uses of 406 plants were recorded.
- Non availability of 266 medicinal and 33 veterinary uses in major literature adds significance to present work and indicates need of thorough investigations for the active principles of plants.
- 42 species recorded as addition to the flora of Ahmednagar, Maharashtra.
- Unavailability of 59 plants in Jain, 1991 and unavailability of 06 plants in Jain, 1999 is of great significance and the information on these plants is addition to his work.
- 29 plants reported in literature for treatment of different diseases with the use of underground plant part or bark in the preparation of medicine. However, during present investigations substitute plant parts like leaf, flower, seed, and fruit are documented. This will certainly help to conserve these plant species.
- Present study provides necessary information to the workers in the field of pharmacology and phytochemistry in screening of individual species in particular disease.
- All the plants are being used successfully by the local people; their properties can also be confirmed with the help of biological screening experiments.
- Present study help in identifying basic needs of the local people.
- Present investigations help to determined conservations strategies in given area.

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